

C. A. GAISER.
LEAD SHARPENER.
APPLICATION FILED FEB. 11, 1911.

1,014,141.

Patented Jan. 9, 1912.

Fig. 1.

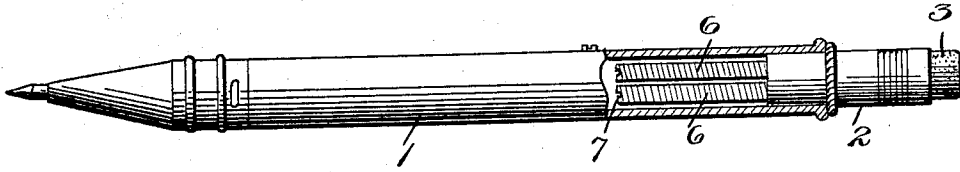


Fig. 2.

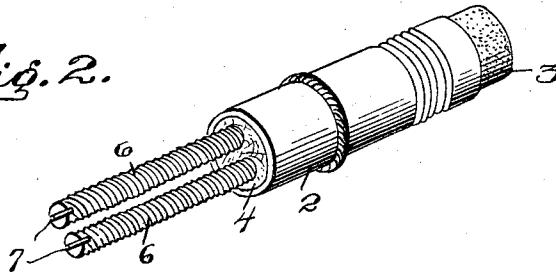
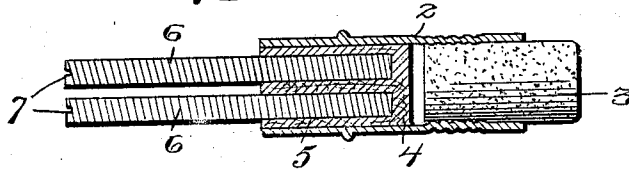


Fig. 3.



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UNITED STATES PATENT OFFICE.

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LEAD-SHARPENER.

1,014,141.

Specification of Letters Patent.

Patented Jan. 9, 1912.

Application filed February 11, 1911. Serial No. 608,061.

To all whom it may concern:

Be it known that I, CHARLES A. GAISER, a citizen of the United States, residing at Toledo, in the county of Lucas and State of Ohio, have invented certain new and useful Improvements in Lead-Sharpener, of which the following is a specification.

This invention comprehends certain new and useful improvements in lead sharpeners for the leads of so-called automatic pencils, and is designed particularly as an attachment for a pencil of the type or character disclosed in Letters Patent of the United States, numbered 991,967, granted to me May 9, 1911, and allowed October 26, 1910, although it is to be understood that the invention is not limited in this regard, but is susceptible of use as a lead sharpener generally, either as a pencil attachment, or a desk appliance.

One of the objects of the invention is a simple, durable and efficient construction of pencil sharpener which will be practically self-cleaning, and which will embody files which will properly guide the lead as it is moved back and forth thereon and prevent the lead from slipping off the files, and the invention also has for an object a device of this character embodying files which are preferably cylindrical and which are capable of being turned about their longitudinal axes from time to time so as to present fresh file surfaces to the lead, whereby the device may be used a relatively long time, until the entire periphery of the file sections has been dulled. And the invention also aims to generally improve this class of devices so as to make them more useful and commercially desirable.

With these and other objects in view as will more fully appear as the description proceeds, the invention consists in certain constructions, arrangements and combinations of the parts that I shall hereinafter fully describe and claim.

For a full understanding of the invention, reference is to be had to the following description and accompanying drawings, in which:

Figure 1 is a side elevation of my device, showing the same in the rear end of the barrel of an automatic pencil; Fig. 2 is a perspective view of the sharpener; and, Fig. 3 is a longitudinal sectional view thereof, the files being shown in elevation.

Corresponding and like parts are referred

to in the following description and indicated in all the views of the drawings by the same reference characters.

Referring to the drawing, the numeral 1 designates the barrel of an automatic pencil such as that disclosed in my former application, before mentioned, and 2 designates the body portion of the lead sharpener, the same being preferably constructed of any suitable metal and being designed for insertion in the rear end of the barrel 1, the body 2 of the sharpening device being designed to receive and hold, at its rear end, a pencil eraser 3, although it is of course to be understood that this feature is not indispensable.

In carrying out my invention, I provide a bushing or block 4, preferably of wood, and fit the same in the forward tubular end of the body portion or casing 2, said bushing being formed with parallel and longitudinally extending openings 5, that are preferably two in number, as clearly illustrated in the drawing. Cylindrical files are inserted at one end in the openings 5 so as to project from the bushing 4, the files being preferably inserted in the bushing before the latter is inserted in the body portion 2, and preferably the files are circumferentially ribbed, so as to facilitate the operation of inserting them in the openings 5 and also to assist in retaining them in said openings after they have once been secured to the bushing. The outer ends of the files 6 are kerfed, as indicated at 7, so as to accommodate a screw driver or the like, whereby the files may be turned, as required. The files 6 extend parallel to each other, as shown, preferably with a space between.

From the foregoing description in connection with the accompanying drawing, the operation of my improved lead sharpener will be apparent. In the practical use of the device, the lead to be sharpened is passed back and forth in engagement with the files and in the crotch which defines the space between the same, the lead being thereby properly guided and prevented from sliding off the files, the shavings and dust falling through the space between the files and thereby rendering the device practically self-cleaning. What little lead dust may remain, after the sharpening operation, may obviously be blown off.

It is manifest that as the entire periphery of the files 6 constitutes an abrading surface,

and as each file may be turned from time to time as required by a screw driver or similar tool applied to the kerfed end of the file, the device may be used for a relatively
5 long time, fresh filing surfaces being brought into operative position from time to time until the entire periphery of each file has become dulled.

As the opposing surfaces of the files that
10 are engaged by the lead are substantially vertical when the two files are held in the same horizontal plane in the practical use of the device, it is clear that this feature facilitates the dropping of the dust down
15 through the space between the files and helps to make the device self-cleaning.

Obviously, my improved sharpener may be very cheaply made and the parts readily assembled.

20 In the preferred embodiment of the invention, when used with the barrel of an

automatic pencil, the files will be protected at all times when not in use, as is evident.

Having thus described the invention, what is claimed as new is:

25 As a new article of manufacture, a pencil sharpener comprising a holder having sockets spaced apart and extending in parallel relations, and two cylindrical members having peripheral abrading surfaces and
30 supported in said sockets and engaging the same with sufficient force to prevent rotary movement therein while in use, but which will yield for turning when abnormal force
35 is applied.

In testimony whereof, I affix my signature in presence of two witnesses.

CHARLES A. GAISER. [L. s.]

Witnesses:

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